



Thursday, August 15, 2019

Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500
SDG ID: GCD82160
Sample ID#s: CD82160 - CD82162

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

August 15, 2019

SDG I.D.: GCD82160

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CD82160	SURFACE WATER
TRIP BLANK 1	CD82161	SURFACE WATER
TRIP BLANK 2	CD82162	SURFACE WATER



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 15, 2019

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SURFACE WATER
Location Code: AECOME-GULF
Rush Request: Standard
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

08/09/19
08/09/19

Time

10:45
16:00

Laboratory Data

SDG ID: GCD82160
Phoenix ID: CD82160

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: OUTFALL 003

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	08/10/19	DA	E1664A
pH	7.92	1.00	pH Units	1	08/10/19 03:58	RWR/KDB	SM4500-H B-11
Total Suspended Solids	31	5.0	mg/L	1	08/13/19	BMD/BJA	SM2540D-11
Semi-Volatile Extraction	Completed				08/09/19	P/AK	SW3520C

Aromatic Volatiles w/Napthalene

Benzene	ND	1.0	ug/L	1	08/09/19	MH	E624.1
Napthalene	ND	1.0	ug/L	1	08/09/19	MH	E624.1

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	104		%	1	08/09/19	MH	70 - 130 %
% Bromofluorobenzene	94		%	1	08/09/19	MH	70 - 130 %
% Dibromofluoromethane	102		%	1	08/09/19	MH	70 - 130 %
% Toluene-d8	101		%	1	08/09/19	MH	70 - 130 %

Semivolatiles by SIM, PAH

Benzo(a)pyrene	ND	0.10	ug/L	1	08/12/19	WB	E625.1
Napthalene	ND	0.48	ug/L	1	08/12/19	WB	E625.1

QA/QC Surrogates

% 2-Fluorobiphenyl	59		%	1	08/12/19	WB	30 - 130 %
% Nitrobenzene-d5	83		%	1	08/12/19	WB	30 - 130 %
% Terphenyl-d14	23		%	1	08/12/19	WB	30 - 130 %

3

Client ID: OUTFALL 003

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
-----------	--------	------------	-------	----------	-----------	----	-----------

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

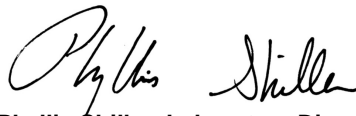
Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

August 15, 2019

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 15, 2019

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SURFACE WATER
Location Code: AECOME-GULF
Rush Request: Standard
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

08/09/19
08/09/19

Time

8:00
16:00

Laboratory Data

SDG ID: GCD82160
Phoenix ID: CD82161

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: TRIP BLANK 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Aromatic Volatiles w/Napthalene</u>							
Benzene	ND	1.0	ug/L	1	08/09/19	MH	E624.1
Napthalene	ND	1.0	ug/L	1	08/09/19	MH	E624.1
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	103		%	1	08/09/19	MH	70 - 130 %
% Bromofluorobenzene	94		%	1	08/09/19	MH	70 - 130 %
% Dibromofluoromethane	101		%	1	08/09/19	MH	70 - 130 %
% Toluene-d8	106		%	1	08/09/19	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 15, 2019

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 15, 2019

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SURFACE WATER
Location Code: AECOME-GULF
Rush Request: Standard
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

08/09/19
08/09/19

Time

8:00
16:00

Laboratory Data

SDG ID: GCD82160
Phoenix ID: CD82162

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: TRIP BLANK 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Aromatic Volatiles w/Napthalene</u>							
Benzene	ND	1.0	ug/L	1	08/09/19	MH	E624.1
Napthalene	ND	1.0	ug/L	1	08/09/19	MH	E624.1
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	103		%	1	08/09/19	MH	70 - 130 %
% Bromofluorobenzene	92		%	1	08/09/19	MH	70 - 130 %
% Dibromofluoromethane	98		%	1	08/09/19	MH	70 - 130 %
% Toluene-d8	102		%	1	08/09/19	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 15, 2019

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

August 15, 2019

QA/QC Data

SDG I.D.: GCD82160

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 491866 (mg/L), QC Sample No: CD81924 (CD82160)													
Oil and Grease by EPA 1664A	BRL	1.4				98.0	96.0	2.1				85 - 115	20
Comment: A Blank spike was performed instead of a matrix spike													
Additional: MS acceptance range 75-125%.													
QA/QC Batch 491874 (pH), QC Sample No: CD82245 (CD82160)													
pH			6.32	6.33	0.20	98.6						85 - 115	20
Comment: Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 492139 (mg/L), QC Sample No: CD82306 (CD82160)													
Total Suspended Solids	BRL	5.0	<5.0	<5.0	NC	97.0						85 - 115	



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

August 15, 2019

QA/QC Data

SDG I.D.: GCD82160

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 491836 (ug/L), QC Sample No: CD82160 (CD82160)										
<u>Semivolatiles by SIM, PAH - Surface Water</u>										
Benzo(a)pyrene	ND	0.02	53	71	29.0				30 - 130	20
Naphthalene	ND	0.50	66	61	7.9				30 - 130	20
% 2-Fluorobiphenyl	71	%	71	69	2.9				30 - 130	20
% Nitrobenzene-d5	84	%	96	89	7.6				30 - 130	20
% Terphenyl-d14	78	%	67	75	11.3				30 - 130	20

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 491944 (ug/L), QC Sample No: CD82161 (CD82160, CD82161, CD82162)

Volatiles - Surface Water

Benzene	ND	0.70	96	89	7.6	92	91	1.1	65 - 135	20
Naphthalene	ND	1.0	105	98	6.9	92	97	5.3	70 - 130	30
% 1,2-dichlorobenzene-d4	104	%	99	96	3.1	100	98	2.0	70 - 130	30
% Bromofluorobenzene	93	%	104	105	1.0	106	105	0.9	70 - 130	30
% Dibromofluoromethane	100	%	95	95	0.0	100	97	3.0	70 - 130	30
% Toluene-d8	103	%	101	100	1.0	98	98	0.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample


LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference


Phyllis Shiller, Laboratory Director
August 15, 2019

Thursday, August 15, 2019

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCD82160 - AECOME-GULF

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
--------	-------	-----------------	----------	--------	----	----------	----------------	-------------------

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

August 15, 2019

SDG I.D.: GCD82160

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

